

## UNITED STATES PATENT AND TRADEMARK OFFICE



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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/151,670 09/11/1998 STEVEN B. KAUFMAN KAUFMAN-9-7 8185

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FARKAS AND MANELLI 2000 M STREET NW 7TH FLOOR WASHINGTON, DC 200363307 EXAMINER
HAROLD, JEFFEREY F

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2644

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Please find below and/or attached an Office communication concerning this application or proceeding.

OG

	Application No.	plicant(s)
	09/151,670	KAUFMAN ET AL.
Office Action Summary	Examiner	Art Unit
	Jefferey F. Harold	2644
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status		
1) Responsive to communication(s) filed on	<u> </u>	
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Thi	is action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) Claim(s) 1-25 is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-25</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.		
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).		
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)

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### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 4-5, 12-13, 16 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Young (U.S. Patent 4,682,957).

Regarding **claims 1** and **12-13**, Young discloses a teleconference and teaching method an apparatus, in addition, Young discloses switching circuitry (27) for accepting input signals from a microphone and directing those to a telephone line for transmission to the remote location via the line. The input signal may come from a standard microphone (28), and is transmitted to a loudspeaker (35). Further, switch (SW4) allow the speakerphone telephone line connection (39) to be connected directly to telephone line (10) or to the telephone handset connection, as disclosed at column 5, lines 28-37, column 6, lines 49-54 and exhibited in figure 2.

Regarding **claims 4 and 5**, Young discloses everything claimed as applied above (see claim 1), in addition, Young discloses wherein the speaker phone circuitry supports both duplex and simplex modes, as discloses at column 4 lines 66 through column 5, line 46.

the structural implementation found in **claim 1**.

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Regarding claim 16, it is interpreted and thus rejected for the same reasons set forth above in claim 1. Since claim 16 discloses a method that corresponds to the apparatus of claim 1, the method is inherent in that it simply provides functionality for

Regarding **claim 20**, it is interpreted and thus rejected for the same reasons set forth above in **claim 1**. Since **claim 20** discloses a means that corresponds to the apparatus of **claim 1**, the means is inherent in that it simply provides functionality for the structural implementation found in **claim 1**.

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## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 2-3, 14, 17-19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young in view of Norris (U.S. Patent 4,930,156).

Regarding **claims 2 and 3**, Young disclose everything claimed as applied above (see claim 1), however, Young fails to disclose a power supply adapted to include a battery. However, the examiner maintains that it was well known in the art to provide a power supply adapted to include a battery, as taught by Norris.

In a similar field of endeavor Norris discloses a telephone receiver transmitter. In addition, Norris discloses a battery power supply (65), as disclosed at column 6, line 16 and exhibited in figure 4.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a power supply adapted to include a battery, as taught by Norris, for the purpose of providing a convenient power source to operate the speakerphone.

Regarding **claim 14**, Young discloses everything claimed as applied above (see claim 1), however, Young fails to disclose a switch having a first position for connecting the handset jack to the telephone and the second position for connecting the audio module to the handset jack. However, the examiner maintains that it was well known in

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the art to provide a switch having a first position for connecting the handset jack to the telephone and the second position for connecting the audio module to the handset jack, as taught by Norris.

In addition, Norris discloses a mode switching device (33), which reads on claimed "switch", wherein one position the signal is transferred directly to the hand set (34) and in the secondary position the signal is transferred directly via the interconnect jack (32), which reads on claimed "audio module", to the ear mounted speaker/microphone combination (49), as disclosed at column 4, lines 27-60 and exhibited in figure 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a switch having a first position for connecting the handset jack to the telephone and the second position for connecting the audio module to the handset jack, as taught by Norris, for the purpose of allowing any conventional telephone to be used to make the initial telephone connection to the remote location, and then the speakerphone circuitry to be connected to the phone line for operation.

Regarding claims 17-19, they are interpreted and thus rejected for the same reasons set forth above in claims 1-3. Since claims 17-19 disclose a method that corresponds to the apparatus of claims 1-3, the method is inherent in that it simply provides functionality for the structural implementation found in claims 1-3.

Regarding claims 21-23, they are interpreted and thus rejected for the same reasons set forth above in claims 1-3. Since claims 21-23 disclose a means that

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corresponds to the apparatus of **claims 1-3**, the means is inherent in that it simply provides functionality for the structural implementation found in **claims 1-3**.

3. **Claims 6-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Young as applied to claim 5 above, and further in view of Eppler, Jr. et al. (U.S. Patent 5,600,714), hereinafter referenced as Eppler.

Regarding **claims 6 and 10**, the Young discloses everything claimed as applied above (see claim 5), however, the Young fails to disclose an audio echo canceler.

However, the examiner maintains that it was well known in the art to provide an audio echo canceler, as taught by Eppler.

In a similar field of endeavor Eppler discloses a conference telephone using dynamic modeled line hybrid. In addition, Eppler discloses room acoustic echo canceler (24), which reads on claimed "audio echo canceler", as disclosed at column 5, lines 8-9 and exhibited in figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing an audio echo canceler, as taught by Eppler, for the purpose of canceling actual echoes in the room with the speaker phone.

Regarding **claim 7**, Young and Eppler disclose everything claimed as applied above (see claim 6), however, the combination fails to disclose wherein the audio echo canceler is an algorithm included in a digital signal processor. However, the examiner

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maintains that it was well known in the art to provide wherein the audio echo canceler is an algorithm included in a digital signal processor, as taught by Eppler.

In addition, Eppler discloses wherein the room acoustic echo canceler (24) during use adapts to both initial conditions and to changes in condition in the room, which reads on claimed "algorithm" as disclosed at column 7, lines 38-52 and exhibited in figure 1, further the room acoustic echo canceler (24) in combination with the line echo canceler (46) are integrated on a DSP chip (70), which reads on claimed "digital signal processor," as disclosed at column 6, line 37 through column 7, line 24 and exhibited in figure 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination by specifically providing wherein the audio echo canceler is an algorithm included in a digital signal processor, as taught by Eppler, for the purpose of integrating component to reduce the size.

Regarding **claims 8 and 11**, the combination (Young in view of Eppler) discloses everything claimed as applied above (see claim 7), however, the combination fails to disclose a hybrid echo canceler. However, the examiner maintains that it was well known in the art to provide hybrid echo canceler, as taught by Eppler.

In addition, Eppler discloses a hybrid echo canceler (46), as disclosed at column 6, line 37 and exhibited in figure 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination by specifically providing a hybrid

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echo canceler, as taught by Eppler, for the purpose of canceling echo associated with the two-four wire line connection.

Regarding **claim 9**, Young discloses everything claimed as applied above (see claim 1), however, Young fails to disclose a first codec, and echo canceler, and a second codec. However, the examiner maintains that it was well known in the art to provide a first codec, and echo canceler, and a second codec, as taught by Eppler.

Regarding the "first codec", Eppler discloses analog-to-digital converter (16) and digital-to-analog converter (32), which reads on claimed "first codec", as disclosed at column 4, line 58 through column 5, line 38 and exhibited in figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a first codec as taught by Eppler, for the purpose of communicating in different formats.

Regarding the echo canceler, Eppler discloses a room acoustic echo canceler (24), which reads on claimed "echo canceler", as disclosed at column 5, lines 8-9 and exhibited in figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing an echo canceler as taught by Eppler, for the purpose of reducing the amount of noise in the circuit.

Regarding the "second codec", Eppler discloses analog-to-digital converter (42) and digital-to-analog converter (54), which reads on claimed "second codec", as disclosed at column 5, lines 42-65 and exhibited in figure 1.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a second codec as taught by Eppler, for the purpose of communicating in different formats.

5. *Claim 15* is rejected under 35 U.S.C. 103(a) as being unpatentable over Young in view of well know prior art (MPEP 2144.03).

Regarding **claim 15**, Young discloses everything claimed, as applied above, (see claim 1), however, Young fails to disclose voice pager. However, the examiner takes official notice of the fact that it was well know in the art to provide voice pager.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a voice pager, for the purpose of notifying listener via a speaker.

6. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young, in view of Norris, in view of Eppler, further in view of well know prior art (MPEP 2144.03).

Regarding **claims 24 and 25**, Young discloses a microphone (28), a loudspeaker (35) and a speaker phone that operates when attached to the telephone and when attached directly to the PSTN, however, Young fails to disclose a handset cord adapter, an audio echo canceler, and a voice pager. However, the examiner maintains that it was well known in the art to provide a headset adapter, an audio echo canceler, and a voice pager, as taught by Norris, Eppler and well know prior art.

Regarding the headset adapter, Norris discloses the encasement (17) comprising a jack (28) to receive a modular plug, which reads on claimed "external handset cord

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adapter", as disclosed at column 3, line 51 through column 4, line 4; and exhibited in figures 1 and 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a handset cord adapter, as taught by Norris, for the purpose of adapting telephones of differing wiring configuration for universal attachment of a speaker phone.

Regarding the echo canceler, Eppler discloses room acoustic echo canceler (24), which reads on claimed "audio echo canceler", as disclosed at column 5, lines 8-9 and exhibited in figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing an audio echo canceler, as taught by Eppler, for the purpose of canceling actual echoes in the room with the speaker phone.

Regarding the voice pager the examiner takes official notice of the fact that it was well know in the art to provide voice pager.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a voice pager, for the purpose of notifying listener via a speaker.

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### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F. Harold whose telephone number is (703) 306-5836. The examiner can normally be reached on Monday-Friday 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

November 7, 2001

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